**INTRODUCTION:**

The Intervention Monitoring System version 2 is an application developed to monitor the interventions provided to the Pantawid beneficiaries by the DSWD XII and external interventions provided by local government units, civil security organizations, and other national government agencies. This version of the application is much more secure than the previous version 1.2 because it has been redeveloped from procedural to the Model-View-Controller (MVC) architecture. Additionally, the developer has incorporated encryption on user login credentials to ensure further security.

**SYSTEM OVERVIEW:**

The Intervention Monitoring System version 2 has been developed to track the interventions provided to the Pantawid beneficiaries. This application is used by the DSWD XII, local government units, civil security organizations, and other national government agencies. The system is designed to be user-friendly, secure, and efficient.

**THE APPLICATION HAS THREE MAIN COMPONENTS, NAMELY:**

1. Model: The Model component is responsible for managing data and the application's business logic. It stores the data in a database and ensures data consistency, validity, and security.
2. View: The View component is responsible for providing a graphical interface to the user. It allows users to interact with the system and displays information related to the interventions provided.
3. Controller: The Controller component is responsible for processing user input, updating the model, and rendering the view. It acts as the intermediary between the Model and the View components.

**FEATURES:**

1. The Intervention Monitoring System version 2 comes with a range of features that enhance its functionality and usability. Some of these features include:
2. Secure Login: The developer has incorporated encryption on user login credentials, ensuring that the application is secure.
3. User Management: The application has a user management feature that allows the system administrator to create, delete, and modify user accounts. Additionally, the system administrator can define the user's role and permissions within the system.
4. Intervention Tracking: The application allows the user to track interventions provided to Pantawid beneficiaries. The user can view the status of the interventions and generate reports.
5. Integration with Other Systems: The Intervention Monitoring System version 2 can integrate with other systems to provide a seamless user experience. This integration allows for the sharing of data between different applications, enhancing the efficiency of the system.

This application comes with a range of features that enhance its functionality and usability. This version is currently in the development stage and will soon be finalized once the final result of the Social Welfare Development Indicator (SWDI) 2023 is released.

**END USERS**

The end-users of the Intervention Monitoring System version 2 are the Municipal Links of Pantawid Pamilyang Program. Their primary role is to encode the interventions provided by the program, as well as those provided by other departments, external programs from local government units, civil security organizations, and other national government agencies. They are responsible for ensuring that the information entered into the system is accurate and up-to-date, to facilitate the monitoring and evaluation of the interventions provided to Pantawid beneficiaries.

**USE CASE**

End User: Municipal Links (End User)

Precondition: The Municipal Link is logged into the Intervention Monitoring System and has access to the Record Intervention functionality.

*Basic Flow:*

1. The Municipal Link selects the Record Intervention option from the system's menu.
2. The system presents a form for the Municipal Link to enter the intervention details, including the beneficiary's name, the intervention type, and the date it was provided.
3. The Municipal Link enters the intervention details into the form and submits it to the system.
4. The system validates the intervention details and saves it to the database.
5. The system displays a success message to the Municipal Link and returns them to the main menu.

*Alternate Flows:*

* If the Municipal Link enters invalid or incomplete intervention details, the system displays an error message and prompts the Municipal Link to correct the errors before resubmitting the form.
* If the system encounters an error while saving the intervention details to the database, it displays an error message to the Municipal Link and prompts them to retry the submission or contact technical support.

Postcondition: The intervention is recorded in the system and can be viewed by authorized users for reporting and analysis purposes.

**DATA DICTIONARY**

A database dictionary is a document that describes the structure and content of a database, including tables, fields, data types, and relationships between tables. It provides a comprehensive reference for developers, administrators, and users to understand the database and its contents.

Database Name: db\_imt

|  |  |  |
| --- | --- | --- |
| Data Dictionary for table `interventions`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| interv\_id | int | Unique identifier for the intervention |
| subject | varchar(100) | Subject of the intervention (e.g., type of service provided) |
| details | text | Additional details about the intervention |
| date\_conducted | date | Date the intervention was conducted |
| yds\_child\_count | int | Number of young children present during the intervention |
| program\_id | int | Identifier for the program under which the intervention was done |
| HOUSEHOLD\_ID | varchar(25) | Identifier for the household to which the intervention was done |
| encoded\_by | int | Identifier for the user who encoded the data |
| date\_encoded | date | Date the data was encoded |
| modified\_by | int | Identifier for the user who modified the data |
| date\_modified | date | Date the data was last modified |
| uid | varchar(36) | Unique identifier for the intervention record |
|  |  |  |
| Data Dictionary for table `lib\_address`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| id | int | Unique identifier for the address |
| REGION | varchar | Region where the address is located |
| PROVINCE | varchar | Province where the address is located |
| MUNICIPALITY | varchar | Municipality where the address is located |
| BARANGAY | varchar | Barangay where the address is located |
|  |  |  |
| Data Dictionary for table `lib\_comp`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| comp\_id | int | Unique identifier for the program |
| comp\_desc | varchar(100) | Description of the program component |
|  |  |  |
| Data Dictionary for table `lib\_programs`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| program\_id | int | Unique identifier for the program |
| subcomp\_id | int | Identifier for the program component under which the program falls |
| program | varchar(100) | Name of the program |
| descriprion | varchar(300) | Description of the program |
|  |  |  |
| Data Dictionary for table `For lib\_subcomp table:`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| subcomp\_id | int(11) | Unique identifier for a subcomponent |
| subcomp | varchar(100) COLLATE ascii\_bin | Name of the subcomponent, up to 100 characters |
| comp\_id | int(11) | ID of the component that this subcomponent belongs to |
|  |  |  |
| Data Dictionary for table `For pppp\_grantee `: | | |
|  |  |  |
| Column Name | Data Type | Description |
| REGION | varchar | Region where the household is located |
| PROVINCE | varchar | Province where the household is located |
| MUNICIPALITY | varchar | Municipality where the household is located |
| BARANGAY | varchar | Barangay where the household is located |
| PUROK | varchar | Purok where the household is located |
| ADDRESS | varchar | Address of the household |
| HOUSEHOLD\_ID | varchar | Unique identifier for the household |
| ENTRY\_ID | double | ID for the entry of data for the household |
| LAST\_NAME | varchar | Last name of the grantee |
| FIRST\_NAME | varchar | First name of the grantee |
| MID\_NAME | varchar | Middle name of the grantee |
| EXT\_NAME | varchar | Suffix or extension name of the grantee |
| HH\_GRANTEE | varchar | Name of the grantee who represents the household |
| CHILD\_BENE | varchar | Names of the children beneficiaries |
| MONITORED\_EDUC | varchar | Flag indicating if the education of the children beneficiaries is monitored |
| BIRTHDAY | datetime | Birth date of the grantee |
| AGE | varchar | Age of the grantee in years |
| REL\_HH | varchar | Relationship of the grantee to the head of household |
| SEX | varchar | Gender of the grantee |
| PREGNANT\_STATUS | varchar | Flag indicating if the grantee is pregnant |
| DISABLED | varchar | Flag indicating if the grantee has a disability |
| SOLO\_PARENT | varchar | Flag indicating if the grantee is a solo parent |
| ATTEND\_SCHOOL | varchar | Flag indicating if the grantee is attending school |
| GRADE\_LEVEL | varchar | Grade level of the grantee if attending school |
| SCHOOL\_NAME | varchar | Name of the school of the grantee if attending school |
| DOMINANT\_SCHOOL | varchar | Name of the dominant school of the children beneficiaries |
| HC\_NAME | varchar | Name of the health center where the grantee receives health services |
| REGISTERED | varchar | Flag indicating if the grantee is registered in the database |
| CLIENT\_STATUS | varchar | Status of the client in the program |
| MEMBER\_STATUS | varchar | Status of the grantee in the household |
| IP\_AFFILIATION | varchar | Affiliation of the grantee to indigenous people |
| MODE\_OF\_PAYMENT | varchar | Mode of payment for the grantee |
| HH\_SET | double | Number of the household set |
| SET\_GROUP | varchar | Group where the household belongs |
| REASON\_FOR\_NOT\_ATTENDING\_SCHOOL | varchar | Reason why the grantee is not attending school |
| REASON\_FOR\_NOT\_ATTENDING\_HEALTH | varchar | Reason why the grantee is not attending health services |
| DATE\_REASON\_SCHOOL | datetime | Date when the reason for not attending school was noted |
| DATE\_REASON\_HEALTH | varchar | Date when the reason for not attending health services was noted |
| RITAL\_STATUS | varchar | The marital status of the grantee |
| DISABILITY | varchar | Indicates if the grantee has a disability or not |
|  |  |  |
| Data Dictionary for table `For swdi\_data `: |  |  |
|  |  |  |
| Column Name | Data Type | Description |
| SWDI\_Transaction\_No | varchar | A unique identifier for each SWDI transaction |
| Household\_ID | varchar | A unique identifier for each household |
| SWDI\_Score | double | The SWDI score for the household, a measure of its poverty level |
| LOWB | varchar | Whether the household is below the poverty threshold |
| ES1 | double | An indicator of the household's economic sufficiency |
| ES2 | double | An indicator of the household's economic sufficiency |
| C1 | double | An indicator of the household's ability to cope with economic shocks |
| C2 | double | An indicator of the household's ability to cope with economic shocks |
| C3 | double | An indicator of the household's ability to cope with economic shocks |
| C4 | double | An indicator of the household's ability to cope with economic shocks |
| Total\_Income | double | The total income of the household |
| Family\_Size | double | The number of people in the household |
| Per\_Capita\_Income | double | The per capita income of the household |
| Monthly\_Per\_Capita\_income | double | The monthly per capita income of the household |
| Monthly\_Provincial\_Per\_Capita\_Poverty | double | The monthly per capita provincial poverty threshold |
| Monthly\_Provincial\_Per\_Capita\_Food | double | The monthly per capita provincial food threshold |
| ES3 | double | An indicator of the household's economic sufficiency |
| ES4 | double | An indicator of the household's economic sufficiency |
| EconSuff | double | An overall indicator of the household's economic sufficiency |
| HCS1 | double | An indicator of the household's health care sufficiency |
| HCS2 | double | An indicator of the household's health care sufficiency |
| HCS | double | An overall indicator of the household's health care sufficiency |
| NC1 | double | An indicator of the household's nutrition sufficiency |
| NC2 | double | An indicator of the household's nutrition sufficiency |
| NC | double | An overall indicator of the household's nutrition sufficiency |
| WCS1 | double | An indicator of the household's water and sanitation sufficiency |
| WCS2 | double | An indicator of the household's water and sanitation sufficiency |
| WCS3 | double | An indicator of the household's water and sanitation sufficiency |
| WCS | double | An overall indicator of the household's water and sanitation sufficiency |
| SA1 | double | An indicator of the household's shelter adequacy |
| HC1 | double | An indicator of the household's human capital |
| HC2 | double | An indicator of the household's human capital |
| HC3 | double | An indicator of the household's human capital |
| HC4 | double | An indicator of the household's human capital |
| SA2 | double | An indicator of the household's shelter adequacy |
| EC1 | double | An indicator of the household's education and training |
| EC2 | double | Economic contribution of adult children in the household |
| SA3 | double | Access to healthcare services |
| RP1 | double | Presence of risk factors in the household (Part 1) |
| RP2 | double | Presence of risk factors in the household (Part 2) |
| RP3 | double | Presence of risk factors in the household (Part 3) |
| SA4 | double | Access to education |
| FA1 | double | Food adequacy - food security |
| FA2 | double | Food adequacy - dietary diversity |
| FA3 | double | Food adequacy - food safety |
| SA5 | double | Access to basic services |
| SocAdeq | double | Overall social adequacy score |
| region\_nick | varchar | Abbreviation of the region where the household is located |
| prov\_name | varchar | Name of the province where the household is located |
| city\_name | varchar | Name of the city/municipality where the household is located |
| brgy\_name | varchar | Name of the barangay where the household is located |
| grantee\_first | varchar | First name of the person who received the grant |
| grantee\_middle | varchar | Middle name of the person who received the grant |
| grantee\_last | varchar | Last name of the person who received the grant |
| total\_children | double | Total number of children in the household |
| IP | varchar | IP address of the user who last updated the record |
| PERIOD | double | Year and month when the record was last updated (YYYYMM format) |
|  |  |  |
| Data Dictionary for table `users`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| user\_id | int(11) | Unique identifier for the user |
| fullname | varchar(80) | Full name of the user |
| username | varchar(45) | Unique username for the user |
| position | varchar(100) | Position of the user |
| assignment | varchar(100) | Assignment of the user |
| email | varchar(100) | Email address of the user |
| password | varchar(300) | Encrypted password of the user |
| role\_id | int(11) | Identifier of the user's role |
| approved | int(11) | Flag indicating if the user has been approved or not (0=not approved, 1=approved) |
| status | varchar(20) | Status of the user's account (Active, Inactive, etc.) |
| picture | longblob | Binary representation of the user's profile picture |
| picture\_size | varchar(40) | Size of the user's profile picture |
| picture\_type | varchar(20) | File type of the user's profile picture |
| SCOPE | varchar(40) | The geographical scope of the user's access (e.g. XII) |
| SCOPE\_TAG | int(11) | Identifier for the geographical scope (0=ML, 1=PROV, 2=REG) |
|  |  |  |
| Data Dictionary for table `roles`: | | |
|  |  |  |
| Column Name | Data Type | Description |
| role\_id | int(11) | Unique identifier for each role in the system |
| role | varchar(100) | Name of the role |
| description | varchar(1000) | Brief description of the role's responsibilities and permissions |

Conclusion:

The Intervention Monitoring System version 2 is a secure and efficient application developed to track interventions provided to the Pantawid beneficiaries. The application is developed using the Model-View-Controller architecture, which makes it more efficient and user-friendly. The developer has incorporated encryption on user login credentials, ensuring that the application is secure. The